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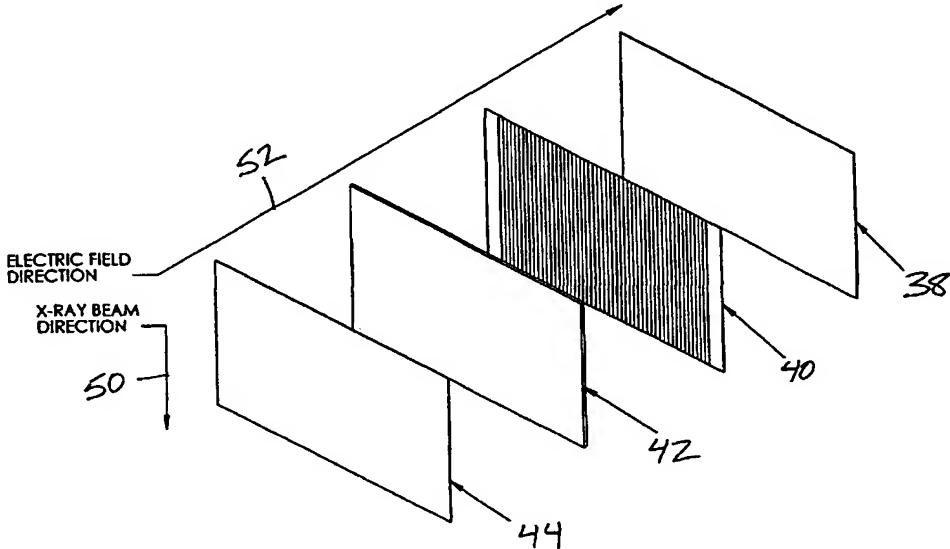
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(54) Title: **AMORPHOUS SELENIUM DETECTOR FOR TOMOTHERAPY AND OTHER IMAGE-GUIDED RADIOTHERAPY SYSTEMS**



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(57) Abstract: A detector for use in medical and industrial applications for detecting high energy radiation, especially for use in tomotherapy and other image-guided radiotherapy systems. The detector is preferably housed in an enclosure. A plurality of detector elements are installed within the enclosure. The detector elements preferably include a substrate (38), a readout electrode layer (40) deposited on at least one surface of the substrate, an amorphous selenium layer (42) deposited on at least one surface of the readout electrode layer, and a high voltage electrode layer (44) deposited on at least one surface of the amorphous selenium layer.



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